

5 1. A turbine blade having an attachment, a platform extending generally radially outward from said attachment, an airfoil extending generally radially outward from said platform, and a shroud extending generally radially outward from said airfoil, said airfoil having an uncoated profile substantially in accordance with Cartesian coordinate values of X, Y, and Z as set forth in Table 1, carried to three decimal places, wherein Z is a distance  
10 measured radially from said platform.

2. The turbine blade of Claim 1 wherein said airfoil has an envelope within +/- 0.100 inches of the profile generated by said Cartesian coordinate values of X, Y, and Z as set forth in Table 1.

15 3. The turbine blade of Claim 1 further comprising a plurality of generally radially extending holes, said holes extending from said attachment, through said platform, said airfoil, and said shroud.

20 4. The turbine blade of Claim 3 wherein said plurality of radially extending holes pass a cooling medium through said blade to cool said airfoil.

5. The turbine blade of Claim 4 wherein said cooling medium is air or steam.

25 6. The turbine blade of Claim 5 wherein said plurality of holes comprises six holes.

7. The turbine blade of Claim 1 wherein said Cartesian coordinate values of X, Y, and Z as set forth in Table 1 are scaled as a function of the same constant to create a scaled-up or scaled down airfoil.

30 8. An airfoil for a turbine blade having a shroud, said airfoil having an uncoated profile substantially in accordance with Cartesian coordinate values of X, Y, and Z as set forth in Table 1, carried to three decimal places, wherein Z is a distance measured radially from a platform.

- 5        9. The airfoil of Claim 8 wherein said airfoil has an envelope within  $\pm 0.100$  inches of the profile generated by said Cartesian coordinate values of X, Y, and Z as set forth in Table 1.
- 10       10. The airfoil of Claim 8 wherein said Cartesian coordinate values of X, Y, and Z as set forth in Table 1 are scaled as a function of the same constant to create a scaled-up or scaled down airfoil.